The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES W. GIBBONEY, JR.

Appeal No. 2001-2143
Application No. 09/093,248

ON BRIEF

Before KRASS, RUGGIERO and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 18-33, all of the pending claims.

The invention is directed to a solid state rectifying fuse for rectifying an incoming AC signal and opening a circuit if a predetermined maximum current level is reached. In particular, either an anode or a cathode, or both, of the device has a plurality of conductor strips attached to the p or n region, or both. When the predetermined current

limit is exceeded, the conductor strips melt to open the circuit. Each conductor strip has a lower total current handling capacity than that of the pn junction of the device so that the current is reduced or terminated before the pn junction can short.

Representative independent claim 18 is reproduced as follows:

> 18. An electrical circuit element for use with an electrical circuit, said circuit element comprising:
>
> an anode;
>
> a cathode; and
>
> rectifying means in electrical connection with said anode and said cathode for rectifying the current in said circuit as said current passes between said anode and said cathode, said anode including fuse means for opening said circuit if a preselected current limit is reached.

The examiner relies on the following reference:

Douglass	5,077,534	Dec. 31, 1991

Claims 18-33 stand rejected under 35 U.S.C. § 112, first paragraph, as relying on a nonenabling disclosure.[1]

Claims 18-33 stand further rejected under 35 U.S.C. § 103 as unpatentable over Douglass.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

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[1] While the examiner explains the rejection in terms of claims 1, 8 and 13, which are no longer in the case, we will presume, as did appellant, that the examiner meant to apply this rejection to claims 18-33.

OPINION

At the outset, we note that instant claims 18-23, as presented in the appendix to the principal brief, are identical to claims 24-29, respectively. We will leave the cancellation of the identical claims to the good auspices of appellant and the examiner since any patent, should one ultimately issue, may not contain identical claims.

Turning, first, to the rejection under 35 U.S.C. § 112, first paragraph, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of 35 U.S.C. § 112 *unless* there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. Assuming that sufficient reason for such doubt does exist, a rejection for failure to teach how to make and/or use will be proper on that basis; such a rejection can be overcome by suitable proofs indicating that the teaching contained in the specification is truly enabling, In re Marzocchi, 439 F.2d 220, 223, 169 USPQ 367, 369 (CCPA 1971); In re Sichert, 566 F.2d 1154, 1160, 196 USPQ 209, 214 (CCPA 1977).

The examiner questions how the structure of the conductor strips 28 can be fabricated. Page 8 of the specification indicates that the strips may be fabricated of copper and that each strip is, preferably, on the order of one to ten microns in thickness

but that the thickness may vary depending upon the desired current handling limits and operating environment. As far as the actual assembly, it would appear that the skilled artisan would know how to attach a metal strip to a semiconductor material as contact leads have been so connected for many years prior to the instant invention. In any event, the examiner has not given any credible reason why the artisan would not have known how to join a metal conductor to a semiconductor material.

The examiner also questions whether there is material between the conductor strips. Since this is not directed to any claimed feature, the inquiry would appear to be irrelevant.

The examiner further questions whether there would be any pn junction if the anode or cathode comprised the strips and the strips are a metal such as copper. The inquiry does not appear reasonable in view of Figures 2A-2C of the drawings since the strips are attached either to the p-type material or to the n-type material, or even to both materials. It does not appear that this affects the p-n junction in any way.

Since the examiner's concerns do not, in our view, raise a reasonable challenge to the sufficiency of disclosure of the instant claimed invention, we will not sustain the rejection of claims 18-33 under 35 U.S.C. § 112, first paragraph, based on nonenablement. Because we do not even find a reasonable basis for challenging the sufficiency of the disclosure, we find no need to analyze the declaration of Dr. Ching-Tang Wang.

Turning now to the rejection under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v, John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason much stem from some teachings, suggestions or implications in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc. , 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re

Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

It is our view that the examiner's rationale for the rejection does not even come close to stating a prima facie case of obviousness. Although Douglass mentions nothing about an anode, a cathode or a rectifying means, the three elements comprising claim 18, for example, or even a diode, the examiner cavalierly holds that the claimed subject matter would have been obvious "[s]ince it is known in the art to include the fuse element shown by Douglass in series with any standard discrete pn diode and the fuse can be connected to either the anode or cathode of the diode" [answer-page 4].

Thus, from the meager disclosure, by Douglass, of a class J time delay fuse, the examiner has extended this teaching, with no support, to make obvious the inclusion of this fuse in a pn diode, the fuse being connected to either the anode or the cathode of the diode. We find nothing within Douglass, or within the knowledge of the skilled artisan, which would have led the artisan to use Douglass' fuse, in any manner, to result in the instant claimed subject matter.

Moreover, appellant makes the reasonable observation that the artisan would not consider a J class fuse for use in a solid state circuit either in series with, or in combination with, pn diodes and we have no convincing rebuttal from the examiner.

There is just simply nothing that would have suggested to the artisan to include the J class fuse of Douglass in a discrete pn diode.

Accordingly, we will not sustain the rejection of claims 18-33 under 35 U.S.C. § 103.

We have not sustained the rejection of claims 18-33 under either 35 U.S.C. § 112, first paragraph, or under 35 U.S.C. § 103.

Thus, the examiner's decision is reversed.

REVERSED

ERROL A. KRASS Administrative Patent Judge	)
JOSEPH F. RUGGIERO Administrative Patent Judge	) BOARD OF PATENT) APPEALS) AND) INTERFERENCES
ANITA PELLMAN GROSS Administrative Patent Judge	)

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